## 10/668999

## SEQUENCE LISTING IAP20 ROS'CLOTTO 21 FEB 2006

<110>	Dreier, Kimberly Jean Krishnan, Rajendra McGavin, David Ross	
<120>	Vaccine for Periodontal Disease	
<130>	PC25634	
<160>	17	
<170>	PatentIn version 3.2	
<210><211><212><212><213>	21	
<220> <223>	Sequencing Primer	
<400> ggattag	1 agata ccctggtagt c	21
<210><211><211><212><213>	19	
<220> <223>	Sequencing Primer	
<400> cccggga	2 gaacg tattcaccg	19
<210><211><211><212><213>	3 550 DNA Bacteroides sp.	
<400> gcacagt	3 gtaaa cgatgaatac tcgctgtttg cgatacactg taagcggcca agcg	aaagcg 60
ttaagta	tatte cacetgggga gtacgeegge aaeggtgaaa etcaaaggaa ttga	cggggg 120
cccgca	acaag cggaggaaca tgtggtttaa ttcgatgata cgcgaggaac ctta	cccggg 180
cttaaat	attgc gctggctttt accggaaacg gtattttctt cggaccagcg tgaa	ggtgct 240
gcatggt	gttgt cgtcagctcg tgccgtgagg tgtcggctta agtgccataa cgag	cgcaac 300
ccttate	cettt agttactaac agttttgetg aggactetaa agagaetgee gteg	taagat 360

gcgaggaagg	tggggatgac	gtcaaatcag	cacggccctt	acgtccgggg	ctacacacgt	420
gttacaatgg	ggagcacagc	aggttgctac	acggcgacgt	gatgccaatc	cgtaaaactc	480
ctctcagttc	ggatcgaagt	ctgcaacccg	acttcgtgaa	gctggattcg	ctagtaatcg	540
cgcatcagcc						550
<210> 4 <211> 560 <212> DNA <213> Por		levii				
<400> 4 cgctgtaaac	gatgattact	cagagtatgc	gatataatgt	atgctctcaa	gcgaaagcgt	60
taagtaatcc	acctggggag	tacgtcggca	acgatgaaac	tcaaaggaat	tgacgggggc	120
ccgcacaagc	ggaggaacat	gtggtttaat	tcgatgatac	gcgaggaacc	ttacctggga	180
ttgaaatgta	tatgccggta	tcccgaaagg	ggtgctattc	acttcggtga	cgtatatgta	240
ggtgctgcat	ggttgtcgtc	agctcgtgcc	gtgaggtgtc	ggcttaagtg	ccataacgag	300
cgcaaccctt	atcgtcagtt	gctagcaggt	aaagctgagg	actctggcga	gactgccgtc	360
gtaaggcgag	aggaaggtgg	ggatgacgtc	aaatcagcac	ggcccttata	tccagggcga	420
cacacgtgtt	acaatggtga	ggacaaaggg	tcgctacccg	gtgacgggat	gccaatctcc	480
aaacctcatc	tcagttcgga	tcggagtctg	caactcgact	ccgtgaagct	ggattcgcta	540
gtaatcgcgc	atcagccatg					560
<210> 5 <211> 520 <212> DNA <213> Tan		sythensis				
<400> 5	ttgcgatata	cagtaagctc	tacagogaaa	gcgttaagta	atccacctgg	60
	ggcaacggtg					120
	taattcgatg					180
ggacagtgag	agctgtcttc	ccttcggggc	gtctatgtag	gtgctgcatg	gttgtcgtca	240
gctcgtgccg	tgaggtgtcg	gcttaagtgc	cataacgagc	gcaaccctga	ctgtcagttg	300
ctaacaggtt	aagctgagga	ctctggcggg	actgccggcg	taagctgtga	ggaaggttgg	360
gatgacgtca	aatcagcacg	gcccttacat	ccggggcgac	acacgtgtta	caatggcagg	420
gacaaagggc	agctaccggg	cgaccggatg	ccaatctcca	aaccctgtct	cagttcggat	480

<210> 6

<211> 1496

<212> DNA

<213> Bacteroides sp.

<400> 6

aggettacae atgeaagteg aggggeagea ttatettage ttgetaagat agatggegae 60 eggegeaegg gtgagtaaca egtateeaae etteeggtta eteggggata ggetttegaa 120 agaaagatta atacccgatg ttgcgtatct ttctcctgaa agatacgcca aaggattccg 180 gtaaccgatg gggatgcgtt ccattaggca gttggcgggg taacggccca ccaaaccttc 240 gatggatagg ggttctgaga ggaaggtccc ccacattgga actgagacac ggtccaaact 300 cctacgggag gcagcagtga ggaatattgg tcaatggacg gaagtctgaa ccagccaagt 360 agcgtgaagg atgactgccc tctgggttgt aaacttcttt tatacgggaa taacatgagg 420 tacgcgtacc ttattgcatg taccgttatg aataagcatc ggctaactcc gtgccagcag 480 ccgcggtaat acggaggatg cgagcgttat ccggatttat tgggtttaaa gggagcgtag 540 gtgggatatt aagtcagctg tgaaagtttg gggctcaacc ttaaaattgc agttgatact 600 ggtttccttg agtacggtac aggtgggcgg aattcgtggt gtagcggtga aatgcttaga 660 tatcacgaag aactccgatc gcgaaggcag ctcaccgggc cggaactgac actgatgctc 720 gaaagtgcgg gtatcaaaca ggattagata ccctggtagt ccgcacagta aacgatgaat 780 actegetgtt tgegatacae tgtaagegge caagegaaag egttaagtat tecacetggg 840 gagtacgccg gcaacggtga aactcaaagg aattgacggg ggcccgcaca agcggaggaa 900 catgtggttt aattegatga tacgegagga acettaceeg ggettaaatt gegetggett 960 ttaccggaaa cggtattttc ttcggaccag cgtgaaggtg ctgcatggtt gtcgtcagct 1020 cgtgccgtga ggtgtcggct taagtgccat aacgagcgca acccttatct ttagttacta 1080 acagttttgc tgaggactct aaagagactg ccgtcgtaag atgcgaggaa ggtggggatg 1140 acgtcaaatc agcacggccc ttacgtccgg ggctacacac gtgttacaat ggggagcaca 1200 gcaggttgct acacggcgac gtgatgccaa tccgtaaaac tcctctcagt tcggatcgaa 1260 gtctgcaacc cgacttcgtg aagctggatt cgctagtaat cgcgcatcag ccacggcgcg 1320 gtgaatacgt tcccgggcct tgtacacacc gcccgtcaag ccatgaaagc cgggggtacc 1380 tgaagtacgt aaccgcgagg atcgtcctag ggtaaacctg gtgattgggg ctaagtcgta 1440

acaaggtagc	cgtaccggaa	ggtgcggctg	gaacacctcc	tttctggagc	gatgcc	1496
<210> 7 <211> 563 <212> DNA <213> Bac	teroides sp					
<400> 7	tgaatactcg	ctgtttgcga	tacactotaa	acaaccaaac	gaaagcgtta	60
	ctggggagta					120
	aggaacatgt					180
aattgcgct	ggcttttacc	ggaaacggta	ttttcttcgg	accagcgtga	aggtgctgca	240
ggttgtcgt	cagctcgtgc	cgtgaggtgt	cggcttaagt	gccataacga	gcgcaaccct	300
atctttagt	tactaacagt	tttgctgagg	actctaaaga	gactgccgtc	gtaagatgcg	360
aggaaggtgg	ggatgacgtc	aaatcagcac	ggcccttacg	tccggggcta	cacacgtgtt	420
acaatgggga	gcacagcagg	ttgctacacg	gcgacgtgat	gccaatccgt	aaaactcctc	480
tcagttcgga	tcgaagtctg	caacccgact	tcgtgaagct	ggattcgcta	gtaatcgcgc	540
atcagccacg	gcgcggtgaa	tac				563
<210> 8 <211> 563 <212> DNA <213> Bact	teroides sp					
<400> 8 cagtaaacga	tgaatactcg	ctgtttgcga	tacactgtaa	gcggccaagc	gaaagcgtta	60
agtattccac	ctggggagta	cgccggcaac	ggtgaaactc	aaaggaattg	acgggggccc	120
gcacaagcgg	aggaacatgt	ggtttaattc	gatgatacgc	gaggaacctt	acccgggctt	180
aaattgcgct	ggcttttacc	ggaaacggta	ttttcttcgg	accagcgtga	aggtgctgca	240
tggttgtcgt	cagctcgtgc	cgtgaggtgt	cggcttaagt	gccataacga	gcgcaaccct	300
tatctttagt	tactaacagt	tttgctgagg	actctaaaga	gactgccgtc	gtaagatgcg	360
aggaaggtgg	ggatgacgtc	aaatcagcac	ggcccttacg	tccggggcta	cacacgtgtt	420
	gcacagcagg					480
	tcgaagtctg					540
	gcgcggtgaa		5 5 . 5 . 5		J J-J-	563
	5050550544					203

<210> 9 <211> 565 <212> DNA

<213> Bacteroides sp.

<400> 9 gcacagtaaa cgatgaatac tcgctgtttg cgatacactg taagcggcca agcgaaagcg 60 ttaagtattc cacctgggga gtacgccggc aacggtgaaa ctcaaaggaa ttgacggggg 120 cccgcacaag cggaggaaca tgtggtttaa ttcgatgata cgcgaggaac cttacccggg 180 cttaaattgc gctggctttt accggaaacg gtattttctt cggaccagcg tgaaggtgct 240 gcatggttgt cgtcagctcg tgccgtgagg tgtcggctta agtgccataa cgagcgcaac 300 ccttatcttt agttactaac agttttgctg aggactctaa agagactgcc gtcgtaagat 360 gcgaggaagg tggggatgac gtcaaatcag cacggccctt acgtccgggg ctacacacgt 420 gttacaatgg ggagcacagc aggttgctac acggcgacgt gatgccaatc cgtaaaactc 480 ctctcagttc ggatcgaagt ctgcaacccg acttcgtgaa gctggattcg ctagtaatcg 540 cgcatcaacc acggcgcggt gaata 565

<210> 10 <211> 564 <212> DNA

<213> Bacteroides sp.

<400> 10 acagtaaacg atgaaatact cgctgtttgc gatacactgt aagcggccaa gcgaaagcgt 60 taagtattcc acctggggag tacgccggca acggtgaaac tcaaaggaat tgacgggggc 120 ccgcacaagc ggaggaacat gtggtttaat tcgatgatac gcgaggaacc ttacccgggc 180 ttaaattgcg ctggctttta ccggaaacgg tattttcttc ggaccagcgt gaaggtgctg 240 catggttgtc gtcagctcgt gccgtgaggt gtcggcttaa gtgccataac gagcgcaacc 300 cttatcttta gttactaaca gttttgctga ggactctaaa gagactgccg tcgtaagatg 360 cgaggaaggt ggggatgacg tcaaatcagc acggccctta cgtccggggc tacacacgtg 420 ttacaatggg gagcacagca ggttgctaca cggcgacgtg atgccaatcc gtaaaactcc 480 tctcagttcg gatcgaagtc tgcaacccga cttcgtgaag ctggattcgc tagtaatcgc 540

564

<210> 11 <211> 566

gcatcaacca cggcgcggtg aata

```
<212> DNA
<213> Bacteroides sp.
<220>
<221> misc feature
<222>
      (547)..(547)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222>
       (555)..(555)
<223> n is a, c, g, or t
<400> 11
cgcacagtaa acgatgaata ctcgctgttt gcgatacact gtaagcggcc aagcgaaagc
                                                                       60
gttaagtatt ccacctgggg agtacgccgg caacggtgaa actcaaagga attgacgggg
                                                                      120
gcccgcacaa gcggaggaac atgtggttta attcgatgat acgcgaggaa ccttacccgg
                                                                      180
gcttaaattg cgctggcttt taccggaaac ggtattttct tcggaccagc gtgaaggtgc
                                                                      240
tgcatggttg tcgtcagctc gtgccgtgag gtgtcggctt aagtgccata acgagcgcaa
                                                                      300
cccttatctt tagttactaa cagttttgct gaggactcta aagagactgc cgtcgtaaga
                                                                      360
tgcgaggaag gtggggatga cgtcaaatca gcacggccct tacgtccggg gctacacacg
                                                                      420
tgttacaatg gggagcacag caggttgcta cacggcgacg tgatgccaat ccgtaaaact
                                                                      480
cctctcagtt cggatcgaag tctgcaaccc gacttcgtga agctggattc gctagtaatc
                                                                      540
gcgcatnacc acggngcggt gaatac
                                                                      566
<210>
      12
<211>
      565
<212> DNA
<213> Bacteroides sp.
<400> 12
gcacagtaaa cgatgaatac tcgctgtttg cgatacactg taagcggcca agcgaaagcg
                                                                       60
ttaagtattc cacctgggga gtacgccggc aacggtgaaa ctcaaaggaa ttgacggggg
                                                                      120
cccgcacaag cggaggaaca tgtggtttaa ttcgatgata cgcgaggaac cttacccggg
                                                                      180
cttaaattgc gctggctttt accggaaacg gtattttctt cggaccagcg tgaaggtgct
                                                                      240
gcatggttgt cgtcagctcg tgccgtgagg tgtcggctta agtgccataa cgagcgcaac
                                                                      300
cettatettt agttactaac agttttgetg aggactetaa agagactgee gtegtaagat
                                                                      360
gcgaggaagg tggggatgac gtcaaatcag cacggccctt acgtccgggg ctacacacgt
                                                                      420
gttacaatgg ggagcacagc aggttgctac acggcgacgt gatgccaatc cgtaaaactc
                                                                      480
```

ctctcagttc ggatcgaagt ctgcaacccg acttcgtgaa gctggattcg ctagtaatcg	540
cgcatcagcc acggcgcggt gaata	565
<210> 13 <211> 565 <212> DNA <213> Bacteroides sp.	
<400> 13	
cacagtaaac gatgaatact cgctgtttgc gatacacggt aagcggccaa gcgaaagcgt	60
taagtattcc acctggggag tacgccggca acggtgaaac tcaaaggaat tgacgggggc	120
ccgcacaagc ggaggaacat gtggtttaat tcgatgatac gcgaggaacc ttacccgggc	180
ttaaattgcg ctggctttta ccggaaacgg tattttcttc ggaccagcgt gaaggtgctg	240
catggttgtc gtcagctcgt gccgtgaggt gtcggcttaa gtgccataac gagcgcaacc	300
cttatcttta gttactaaca gttttgctga ggactctaaa gagactgccg tcgtaagatg	360
cgaggaaggt ggggatgacg tcaaatcagc acggccctta cgtccggggc tacacacgtg	420
ttacaatggg gagcacagca ggttgctaca cggcgacgtg atgccaatcc gtaaaactcc	480
tctcagttcg gatcgaagtc tgcaacccga cttcgtgaag ctggattcgc tagtaatcgc	540
gcatcagcca cggcgcggtg aatac	565
<210> 14 <211> 564 <212> DNA <213> Bacteroides sp.	
<400> 14 acagtaaacg atgaatactc gctgtttgcg atacacggta agcggccaag cgaaagcgtt	60 .
aagtattcca cctggggagt acgccggcaa cggtgaaact caaaggaatt gacgggggcc	120
cgcacaagcg gaggaacatg tggtttaatt cgatgatacg cgaggaacct tacccgggct	180
taaattgcgc tggcttttac cggaaacggt attttcttcg gaccagcgtg aaggtgctgc	240
atggttgtcg tcagctcgtg ccgtgaggtg tcggcttaag tgccataacg agcgcaaccc	300
ttatctttag ttactaacag ttttgctgag gactctaaag agactgccgt cgtaagatgc	360
gaggaaggtg gggatgacgt caaatcagca cggcccttac gtccggggct acacacgtgt	420
tacaatgggg agcacagcag gttgctacac ggcgacgtga tgccaatccg taaaactcct	480
ctcagttcgg atcgaagtct gcaacccgac ttcgtgaagc tggattcgct agtaatcgcg	540

.

catcagccac ggcgcggtga atac	564
<210> 15 <211> 565 <212> DNA <213> Bacteroides sp.	
<400> 15 cacagtaaac gatgaatact cgctgtttgc gatacacggt aagcggccaa gcgaaagcgt	60
taagtattcc acctggggag tacgccggca acggtgaaac tcaaaggaat tgacgggggc	120
ccgcacaagc ggaggaacat gtggtttaat tcgatgatac gcgaggaacc ttacccgggc	180
ttaaattgcg ctggctttta ccggaaacgg tattttcttc ggaccagcgt gaaggtgctg	240
catggttgtc gtcagctcgt gccgtgaggt gtcggcttaa gtgccataac gagcgcaacc	300
cttatcttta gttactaaca gttttgctga ggactctaaa gagactgccg tcgtaagatg	360
cgaggaaggt ggggatgacg tcaaatcagc acggccctta cgtccggggc tacacacgtg	420
ttacaatggg gagcacagca ggttgctaca cggcgacgtg atgccaatcc gtaaaactcc	480
tctcagttcg gatcgaagtc tgcaacccga cttcgtgaag ctggattcgc tagtaatcgc	540
gcatcagcca cggcgcggtg aatac	565
<210> 16 <211> 20 <212> DNA <213> Artificial	
<220> <223> Sequencing Primer	
<400> 16 gagtttgatc ctggctcagg	20
<210> 17 <211> 19 <212> DNA <213> Artificial	
<220> <223> Sequencing Primer	
<400> 17 cccgggaacg tattcaccg	19